

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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SERIAL NO.:

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TITLE: INDUCTION-TYPE GYRATOR CAPABLE OF RECIPROCATING AND VIBRATING MOTIONS

Preliminary Amendment: CLAIM AMENDMENTS

1. (Currently amended) An ~~induction-type~~ induction-type gyrating device comprising:

a stator ~~formed comprised~~ of a base, at least one induction member mounted on said base, and at least two induction coils mounted on said base such that said two induction coils are opposite in the magnetic pole, said base being provided with a seat for mounting a bearing in conjunction with a collar; and

a rotor ~~formed comprised~~ of a rotary disk, at least one first magnet fastened to said rotary disk such that said first magnet faces said induction coils of said stator, said rotor further ~~formed comprised~~ of two inductors fastened to said rotary disk such that said two inductors are opposite in location to said first magnet, said rotary disk being provided with a spindle which is joined with said bearing of said base of said stator whereby said rotary disk is caused to engage in a reciprocating motion by an attracting force and a repelling force which are brought about between said first magnet of said rotor and said induction coils of said stator at the time when said induction coils are driven by a voltage.

2. (Original) The gyrating device as defined in claim 1, wherein the reciprocating motion of said rotary disk of said rotor is enhanced by an increase in number of said induction coils of said stator and said first magnet of said rotor.

3. (Currently amended) The gyrating device as defined in claim 1, wherein said rotor is further ~~formed~~ comprised of a second magnet whereby said second magnet is fastened between said two inductors to enable said rotor to remain in an inertial state.

4. (Original) The gyrating device as defined in claim 3, wherein said second magnet is fastened to said rotary disk of said rotor such that said two inductors and said first magnet are disposed on said second magnet.

5. (Currently amended) The gyrating device as defined in claim 1, wherein said base of said stator is ~~provided with~~ comprised of two low magnetic areas and two high magnetic areas whereby said two low magnetic areas serve to enable said first magnet of said rotor to remain on standby in one of said two high magnetic areas at the time when said induction coils of said stator are not driven by the voltage.

6. (Original) The gyrating device as defined in claim 1, wherein the reciprocating motion of said rotary disk of said rotor brings about an action force and a reaction force whereby the action force and the reaction force are changed at a speed by adjusting the voltage which is used to drive said induction coils, thereby resulting in a vibrating motion of said rotary disk.

7. (Original) The gyrating device as defined in claim 6, wherein the vibrating motion of said rotary disk is brought about in a desired pattern by adjusting the voltage in a specific pattern.

8. (Original) The gyrating device as defined in claim 6, wherein the intensity of the vibrating motion of said rotary disk is enhanced by attaching one or more weights to said rotary disk.

9. (Original) The gyrating device as defined in claim 1 further comprising a cover to shield said rotor and said stator.

10. (Currently amended) The gyrating device as defined in claim 9, wherein one end of said spindle of said rotary disk of said rotor is jutted juts out of said cover to enable said spindle to be used as a drive shaft.